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(71) Applicant(s)
Malcolm Baxter
154 Church Lane, Eston, MIDDLESBROUGH, Cleveland, TS6 9QX, United Kingdom

(72) Inventor(s)
Malcolm Baxter

(74) Agent and/or Address for Service
Mewburn Ellis
2 Cursitor Street, LONDON, EC4A 1BQ, United Kingdom

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GB 1151351 A GB 0995162 A US 4545582 A
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(58) Field of Search
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(54) Board game apparatus.

(57) A board game apparatus comprises a game board 6 having a playing path comprising a number of play zones 10, 12 - 16, markers for movement by the players along the playing path and a set of rules defining the movement of the markers. Sensors 17, such as electrical contacts or a magnetic proximity or pressure sensor, are associated with some of the play zones to activate a light or produce an audible signal in response to the placing of a marker upon one of the zones. The audible signal can be a single tone, a sequence of tones or a voice giving game related instructions. Microchips can be provided in the board or in the markers to enable the sensor to differentiate between a number of markers.

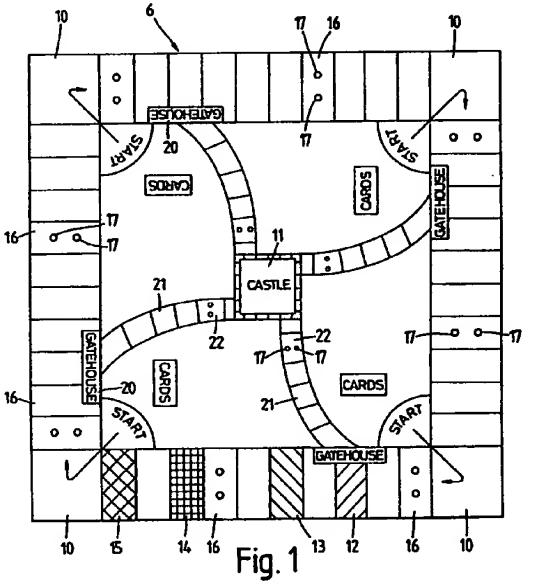

Fig. 1

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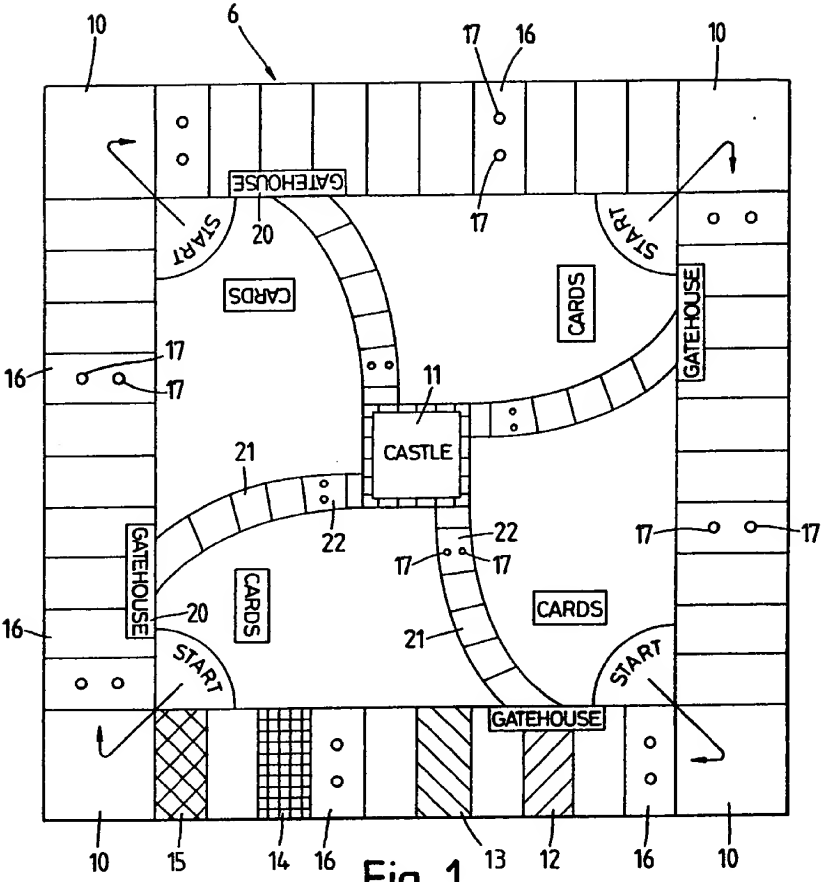
10
6
17
16
10
GATEHOUSE
START
20
17
START
CARDS
CARDS
GATEHOUSE
17
16
17
11
CASTLE
21
22
22
17
17
17
17
GATEHOUSE
CARDS
CARDS
16
20
21
START
START
GATEHOUSE
10
15
14
16
13
12
16
10

Fig. 1

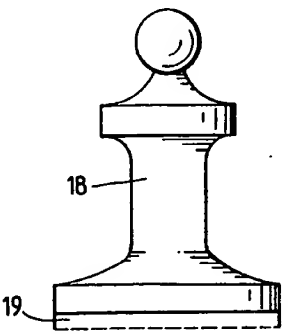
18
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Fig. 2

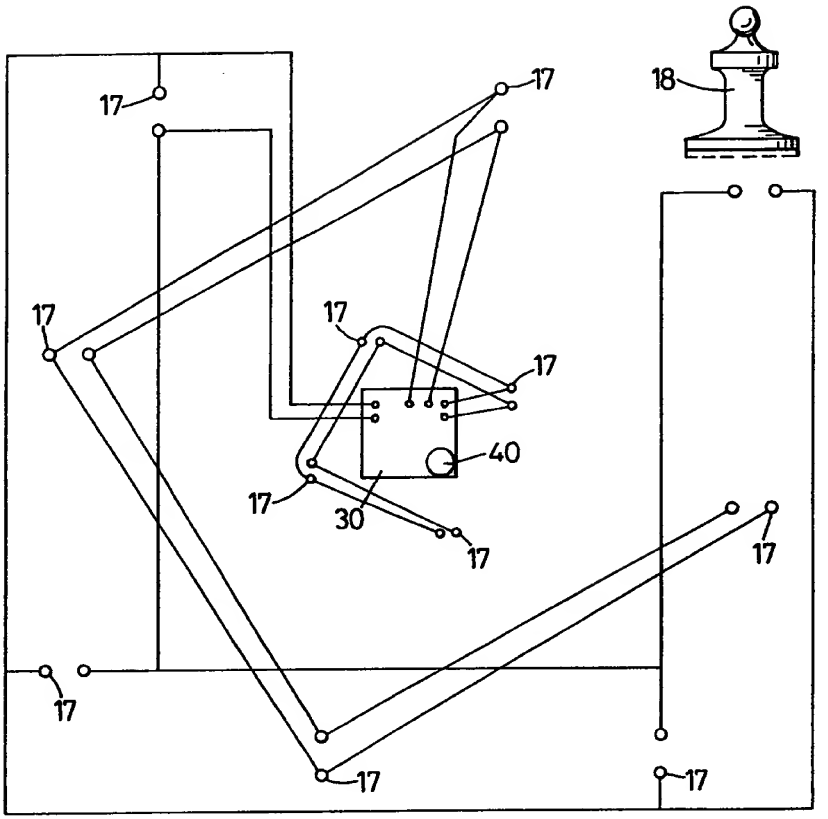

Fig. 3

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BOARD GAME APPARATUS

The present invention relates to board games and is a novel apparatus for playing such a game.

Many board games comprise a game board, upon at least one surface of which is displayed a playing path comprising a sequence of play zones or "squares". Markers associated with the individual players of the game are moved along the playing path and the relative success of the players is determined by, or displayed by, the relative positions of the markers along the path. When a player's marker lands upon certain predetermined play zones, the player may be required to take certain action characteristic of the specific play zone, or the arrival at that zone may amount to successful completion of the game or of a phase of the game.

A very wide range of board games are available and the particular interest of the players in one game rather than another may lie in the broad aim of the game (for example to score a notional goal or collect a number of tokens), or in the detailed rules (which may be complex or simple), or in the tasks involved in playing the game (for example answering questions on one or more subjects). An object of the present invention is to provide additional interest in the playing of a board game by providing novel apparatus for playing the game.

The board game apparatus according to the present invention comprises a game board having upon a surface thereof a playing path comprising a number of play zones, markers for movement by players of the game from one play zone to another along the playing path, a set of rules defining the movement of said markers, sensor means associated with at least some of the play zones to produce a signal in response to the placing of a marker upon one of said zones, and sound-emitting means connected to emit a sound in response to a said signal from a said sensor.

By means of the game apparatus according to the invention, the playing of a known or new game may be enhanced in that a sound may be emitted to indicate the arrival of a playing-piece

upon a given play zone, or an oral instruction may be issued in a similar manner, for the player to take a specific action in consequence of his arrival at that zone.

It is conventional to refer to the base upon which board games are played as the "board" and that convention will be followed herein. However, game boards are not necessarily made of cardboard and the game which is a feature of the present invention may be made of any suitable material, including cardboard, metal, wood or a plastics material. The game board is preferably of a rigid or stiff material and may be foldable or formed in two or more separable pieces, although less preferably the board may be of a flexible material, which may therefore be rolled or folded when not in use.

By a similar convention, the play zones of board games are often still referred to as "squares", although the zones may have shapes other than square. To avoid confusion, the play zones in the present invention will not be called "squares". In this present case, the play zones are preferably rectangular or square but may be of another, preferably regular, shape, for example triangular, hexagonal or circular.

The playing path may be a singular linear path and may form a closed circuit, for example generally following the periphery of the game board, or an open track from a starting point to a finishing point. The linear path may alternatively be branched or duplicated.

The markers for the game may be of a simple shape having special significance to the game to be played or may be representations relevant to the game or to the players, for example in the form of cars for a race game or of persons or objects. They may be of assorted shapes and distinguishable from each other by colour.

The rules may be the conventional rules for playing a known game, for example Snakes and Ladders, Ludo or "Trivial Pursuit", or may define the playing of a novel game or games.

A characteristic feature of the board game apparatus according to the present invention is that sensor means are associated with at least some of the play zones. The sensor means produce a signal when a marker is placed upon one of the relevant zones. The sensor means may take various forms. Thus, in one form of the invention, they comprise one or more electrical contacts and the placing of a marker on the zone closes an electrical circuit. For example, a pair of electrical contacts in the play zone may become electrically interconnected when a conductive marker, or a marker having a conductive strip, is placed on the play zone. In another form of the invention, the sensor means is a pressure sensor, which is activated by the placing of a marker on the relevant play zone. In yet another form of the invention, the sensor is a magnetic proximity detector, activated by magnetic means to produce an electrical signal when a marker formed of or including a magnetic material is placed upon the play zone.

The board game apparatus includes a sound-emitting means, actuatable in response to a signal from a sensor means. The sound thereby emitted may be a single tone, or a sequence of tones, or a more complex chord or combination of sounds. For example, if the associated square is one which is notionally hazardous or disadvantageous to the player, then a single loud warning note may be sounded. On the other hand, if the square is notionally one of success, then a more celebratory tone or tune may be sounded. In one form of the invention, all of the predetermined play zones may give rise to the same sound. In another form, different sounds may arise from different squares of from squares of different significance to the game.

In yet another form of the board game apparatus according to the invention, the sound emitted is that of a voice. For example, the voice may express instructions which must be followed by the player, or may congratulate the player upon some achievement such as winning the game or completing some intermediate phase of the game.

In embodiments of the board game apparatus of the invention, the various components and associated circuitry of the sound-generating system may be provided on or within the game board itself, such as for example by incorporation within the board structure either during or after manufacture. Power supply means such as by way of one or more batteries may also be provided within the board and will preferably be readily accessible for the purpose of easily replacing them when required. In this connection, it is most preferred that the game board is formed as a single, unitary structure, which may be foldable, in order to allow for permanent connection of all the various components of the system via the circuitry in the board.

In a particularly preferred form of the invention, a suitably programmed microchip is provided on or within the structure of the game board to receive an electrical signal from a sensor means and to instruct the sound-emitting means as a consequence. The microchip may be programmed to distinguish between or among two or more signals and to select an appropriate sound as a result. In a more advanced form of the apparatus, the microchip may require that a given number or sequence of moves of a marker have been completed before it instructs the sound-emitting means to sound.

In another embodiment of this invention the microchip may be provided in or as part of the playing piece or there may even be provided a plurality of microchips, e.g. differently programmed ones, in respective pieces, which may be useful for example for generating different sounds determined by the identity of the piece or pieces in question.

As discussed above, a main object of the present invention is to provide additional interest in the playing of a board game. However, a further advantage of the board game apparatus according to the present invention is that it may assist the playing of the game by players having restricted sight, for example by calling their attention to the need to take some action which might otherwise be overlooked.

In certain embodiments of the invention, it is possible for means in addition to the sound-emitting means to be provided for actuation by the microchip to further enhance the interest in the playing of the game. Such further output means may be for example light-emitting means, which may be provided on the board or even on the playing piece or pieces and may or may not be coordinated with actuation of the sound-emitting means. It is even possible within the scope of the invention for the sound-emitting means to be actually replaced by such light-emitting means, or even for both to be provided, but with control means to enable the players to select which output means is actually used in the game.

The invention will now be further described with reference to the accompanying drawings, which illustrate, by way of example only, one preferred embodiment of the board game apparatus according to the present invention and wherein:

Fig.1 is a plan view of the game board;

Fig. 2 is an enlarged elevational view of a marker; and

Fig. 3 is a plan view of the circuitry which is incorporated into the game board shown in Fig. 1.

The illustrated apparatus is designed for a game entitled "King of the Castle", wherein up to four players progress, from starting play zones 10 at the corners of the board, around a playing path adjacent to the periphery of the board and subsequently towards a notional castle 11 at its centre. Each player is associated with a given colour and some of the play zones are coloured with one of the given colours. Progress of the players over the play zones is determined by dice means and by answering questions correctly, as will appear from the game rules set forth hereinafter. Play zones 12, 13, 14 and 15 respectively are marked to signify four different colours in Fig. 1; the other three sides of the playing path are selectively coloured in a similar manner.

Selected other play zones 16, which in the illlustrated game are just two zones per side, each have two electrical contacts 17, which are connected in one or more electrical circuits, for example as shown in Fig. 3. A marker 18 such as that illustrated in Fig. 2, which is so coloured as to identify a particular player, has an electrically conductive base 19 (or alternatively an electrically conductive strip set in its base). The dimensions of the marker 18 are such that, when it is placed in one of the play zones 16, it forms a conductive bridge between the two contacts 17 and thereby closes the electrical circuit. By completing a circuit in this way, the marker activates a sound emitter (not shown) and an appropriate sound, for example a single alarm note, is emitted. The rules will determine what action the player must take as a result.

When the player eventually reaches the relevant "gatehouse" zone 20 and follows a playing path 21 towards the castle 11, his safe arrival at a final play zone 22 similarly causes the emission of a sound, for example a fanfare or some other arcade-type tune to recognise his success.

Typical rules for playing the "King of the Castle" game using the illustrated apparatus may briefly read as follows:

Rules

1. Place the coloured question cards on the matching card area.
2. Each player may choose a colour and must then place the coloured marker upon the matching "start" square.
3. Each player must throw the dice and score a six before he may start. He must then throw again to determine his first move. Moves must be made around the board in a clockwise direction.
4. A player landing on a plain coloured square must stay upon the square until his next turn. If, however, he lands on a question square, then he must answer a question. The question will normally be from the cards associated with the side of the board opposite to that upon which he has landed, except that, when this would entail him answering questions from his own side of the board, then he must answer questions from the cards then

on his right. Instructions for action to be taken on successfully answering a question, or failing to do so, appear on the reverse of the question card.

5. A player falling on any of the other squares, including the sound-producing squares, must follow the instructions on the square.

6. After completing a full circuit of the board, a player must pass through the "gatehouse" and follow the path towards the castle. His final throw must be a one. The first player to reach the castle in this way is the winner.

As shown in Fig. 3, the various components of the system are connected together by appropriate wiring or other suitable connective circuitry, and this is preferably provided within the structure of the board.

As is shown by way of example in Fig. 3, a microchip 40 is mounted on a printed circuit board 30 on which may be mounted any additional components of the sound-generating system, and the board 30 is suitably housed in the centre of the board beneath the "castle" 11, which preferably also incorporates the necessary power supply means, for example one or more batteries which may be accessible for example from the underside of the board. Suitable electrically conductive wiring connects the printed circuit board 30 to the various pairs of electrical contacts 17 provided within the respective playing zones of the board.

CLAIMS:

1. A board game apparatus comprising a game board having upon a surface thereof a playing path comprising a number of play zones, markers for movement by players of the game from one play zone to another along the playing path, a set of rules defining the movement of said markers, sensor means associated with at least some of the play zones to produce a signal in response to the placing of a marker upon one of said zones, and sound-emitting means connected to emit a sound in response to a said signal from a said sensor.

2. A board game apparatus according to claim 1, wherein the game board is a single, unitary structure which is optionally foldable.

3. A board game apparatus according to claim 1 or claim 2, wherein the sound-emitting means comprises a microchip suitably programmed to emit a selected sound in response to a said signal from a said sensor.

4. A board game apparatus according to claim 3, wherein the microchip is provided on or in said game board.

5. A board game apparatus according to claim 3, wherein said microchip is provided in a said marker.

6. A board game apparatus according to claim 5, wherein a plurality of microchips are provided in respective markers, each being suitably programmed for generating a selected sound in response to a respective signal from a respective sensor.

7. A board game apparatus according to any preceding claim, wherein the components of the sound generating system are interconnected via circuitry on or in the game board.

8. A board game apparatus according to any preceding claim, wherein the sensor means comprises a respective pair of electrical contacts provided in a respective play zone, and a

respective marker includes a conductive element for completing an electrical circuit between the contacts when the marker is placed on said respective play zone.

9. A board game apparatus according to any one of claims 1 to 7, wherein the sensor means comprises magnetic proximity sensor means for detecting the presence of a respective said marker placed on a said respective play zone.

10. A board game apparatus according to any one of claims 1 to 7, wherein the sensor means comprises pressure sensor means for detecting a respective said marker placed on said play zone.

11. A board game apparatus according to any preceding claim, wherein the sound emitted by said sound-emitting means is a single tone or sequence of tones, a tune or an oral verbal instruction.

12. A board game apparatus according to any preceding claim, wherein the sound-emitting means emits different sounds dependent upon the play zone or zones activated by the markers.

13. A board game apparatus according to any preceding claim, further including light-emitting means for actuation in response to a said signal from a said sensor.

14. A board game apparatus according to claim 13, wherein said light-emitting means completely replaces said defined sound-emitting means.

15. A board game apparatus substantially as described herein with reference to the accompanying drawings.

Patents Act 1977
Examiner's report to the Comptroller under Section 17
(The Search report)

Application number
GB 9320909.6

Relevant Technical Fields

(i) UK Cl (Ed.L) A6H

(ii) Int Cl (Ed.5) A63F (3/00, 3/02)

Search Examiner
PHIL THORPE

Date of completion of Search
13 DECEMBER 1993

Databases (see below)
(i) UK Patent Office collections of GB, EP, WO and US patent specifications.

(ii)

Documents considered relevant following a search in respect of Claims :-
1-15

Categories of documents

X: Document indicating lack of novelty or of inventive step.

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P: Document published on or after the declared priority date but before the filing date of the present application.

E: Patent document published on or after, but with priority date earlier than, the filing date of the present application.

&: Member of the same patent family; corresponding document.

Category	Identity of document and relevant passages		Relevant to claim(s)
X	GB 2237514 A	(TAYLOR) see page 19 lines 14-17	1-3,7,8, 10-14
X	GB 2178667 A	(CARSON) see page 5 lines 61-66	1,2,7,8,10, 11,13
X	GB 2103943 A	(SCISYS-W) see page 6 lines 5-9	1-4,7,9, 11-14
X	GB 1151351	(WHITE) see page 3 lines 9-21	1,2,7,8, 11,12
X	US 4545582	(ANDREWS) see whole document	1,2,9,13,14
X	US 4398720	(CALIFORNIA R & D) see whole document	1-4,7,9, 11-14
X	US 4348191	(LIPSITZ) see whole document	1-4,7,8, 11,12
X	GB 995162	(GLASS) see whole document	1,2,7,8, 10-14

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